

## NOTICE OF REASONS FOR REJECTION

**Application Number:** 2002-286510  
**Drafted:** 2006/06/30 (year/month/day)  
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**Cited Articles:** Article 29, Paragraph 1  
Article 29, Paragraph 2  
Article 36

**This application should be rejected for the reason(s) given below. If the applicant wishes to comment thereon, the applicant is invited to submit a response within three months from the Mailing Date of this notice.**

### REASON

(Reason 1)

The invention(s) according to the below-listed claim(s) of the present application was disclosed in the below-listed distributed publication(s), or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the present application, and it is therefore deemed to be unpatentable under the provisions of Japanese Patent Law, Article 29, Paragraph 1, Number 3.

(See the List of Citations for the cited publications)

### EXAMINER'S COMMENTS

- Claims 1 and 7

Citations 1 and 2

Remarks:

The recitation “used for an image forming method that utilizes a heat-pressure type fuser equipped with a fusing member having a surface layer containing polybenzimidazole in fusing” in claim 1 of the present application does not limit the constitution of the toner. Therefore, the electrophotographic toner of the present invention is deemed to be a toner comprising at least a cycloolefin copolymer resin as a binder resin.

Citations 1 and 2 disclose toners comprising a cycloolefin copolymer resin as a binder resin. Therefore, there is no constitutional difference between the invention

according to claim 1 of the present application and the inventions disclosed in Citations 1 and 2.

The same applies to claim 7.

- Claim 3

Citations 1 and 2

Remarks:

The Examples in Citations 1 and 2 disclose toners in which the amount of included cycloolefin copolymer resin is within the scope of the present invention.

- Claim 6

Citations 1 and 2

Remarks:

Paragraph [0025] in Citation 1 discloses that applicability to color toners is possible and applicability to black toners is disclosed in the Examples in Citation 1. Also, paragraph [0027] in Citation 2 lists substances that can be used as coloring agents. Considering the above-mentioned disclosures, matters equivalent to the toner being a full-color toner are disclosed in Citations 1 and 2.

(Reason 2)

The invention(s) according to the below-listed claim(s) of the present application could have been easily made prior to the filing of the present application by a person with average knowledge in the field to which the invention(s) belongs based on the invention(s) described in the below-listed distributed publication(s) or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the present application, and it is therefore deemed to be unpatentable under the provisions of Japanese Patent Law, Article 29, Paragraph 2.

(See the List of Citations for the cited publications)

## EXAMINER'S COMMENTS

- Claim 2

Citations 2 and 3

Remarks:

Claim 1 and paragraphs [0017] to [0019] in Citation 2 disclose that the cycloolefin copolymer resin, which is a binder resin, has two molecular weight fractions.

Also, Example 1 in Citation 3 discloses a toner which comprises binder resins that satisfy the molecular weight conditions of the present invention and that are included in the ratios of the present invention.

Furthermore, Citations 2 and 3 relate to the same technical field of toners in which multiple binder resins having different molecular weights are mixed and have the common problem to be solved of improving non-offset.

Accordingly, a person skilled in the art could have easily conceived of determining the molecular weight and added ratio of each component of the binder resin in Citation 2 referring to Citation 3 so as to constitute the invention according to claim 2 of the present application.

- Claim 4

Citations 1 and 2

Remarks:

Using the boron complex of the present invention as a charge control agent in a toner was merely a well-known technique in the relevant technical field (for example, refer to Japanese Unexamined Patent Application, First Publication No. H10-10781 and/or Japanese Unexamined Patent Application, First Publication No. 2001-75307). Also, even after considering the disclosures in the Detailed Description of the Invention, there is no basis for the effect of particularly using the boron complex.

Accordingly, selecting the boron complex of the present invention as a charge control agent in a toner is merely a matter that could have been arbitrarily selected and determined by a person skilled in the art.

- Claim 5

Citations 1 and 2

Remarks:

From the view point of the chargeability of a toner, making the amount of residual solvent the level of the present invention was normally carried out in the relevant technical field and there is nothing remarkable about this (for example, refer to Japanese Unexamined Patent Application, First Publication No. H06-67460 and/or Japanese Unexamined Patent Application, First Publication No. H10-142838).

(Reason 3)

The recitation of the claims of the present application fails to satisfy the requirements of Japanese Patent Law, Article 36, Paragraph 6, Numbers 1 and 2 with regard to the points listed below.

### EXAMINER'S COMMENTS

(1) The inventions according to claims 4 and 11 of the present application use a boron complex represented by a general formula as a charge control agent. However, only that having the product name LR-147 has been specifically disclosed as the boron complex and there are no disclosures about other specific chemical structures.

Also, even after considering the other disclosures in the specification of the present application, there is no clue that this can be extended to and generalized for the situation when using a compound shown by the general formula of the present application other than the above-mentioned LR-147 for the boron complex as a means for solving the problem.

Accordingly, the inventions according to claims 4 and 11 are not disclosed in the Detailed Description of the Invention.

(2) Although it is deemed that the invention according to claim 1 of the present application is an "electrophotographic toner", even after considering the disclosures in the Detailed Description of the Invention, it is unclear how the constitution of the "toner" per se is specified by the recitation in claim 1 of using an image forming method that utilizes a specific heat-pressure type fuser.

For example, in the image formation of Example 1 and Comparative Example 2 and Example 3 and Comparative Example 3, the same toners A and C are used respectively and there is only a difference in the material of the fusing roll. In other words, even if they are the same toner, situations within the scope of the present invention and situations outside the scope of the present invention occur. Therefore, the scope of the present invention as a "toner" is unclear.

Accordingly, the inventions according to claims 1 to 7 are unclear.

(3) It is recited in claims 2 and 9 that the cycloolefin copolymer resin is a mixture of two or three types of cycloolefin polymer resins having weight-average molecular weights within specific ranges. There is nothing disclosed about cycloolefin copolymer resins outside these weight-average molecular weight ranges and there is the situation where each of the copolymer resins is differentiated only by the molecular weight ranges.

However, in this situation, the scopes of the inventions according to claims 4 and 9, which are mixtures of two or three types of cycloolefin copolymer resins having

weight-average molecular weights within specific ranges, are unclear.

In other words, even if it is not a mixture of two or three types of resins having weight-average molecular weights within specific ranges, it is possible that a resin can be divided into two or three types of resins having weight-average molecular weights of the present invention if the resin has a certain degree of distribution in its molecular weight.

Also, a mixture of resins having certain weight-average molecular weights newly forms a resin having a different weight-average molecular weight and a different molecular weight distribution and the formed resin cannot be differentiated from a resin having such a molecular weight distribution from the beginning.

Accordingly, the inventions according to claims 2 and 9 are unclear.

**No reasons for rejection are currently known for the claims which were not indicated in this Notice of Reasons for Rejection. The applicant will be notified of new reasons for rejection if such reasons for rejection are found.**

### **LIST OF CITATIONS**

1. Japanese Unexamined Patent Application, First Publication No. 2000-66438
2. Japanese Unexamined Patent Application, First Publication No. 2000-284528
3. Japanese Unexamined Patent Application, First Publication No. H10-268573

### **RECORD OF PRIOR ART SEARCH**

Searched Technical Fields: IPC GO3G9/08

This record of the prior art search does not constitute the reasons for rejection.